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I am submitting herewith a dissertation written by Rebecca Meredith Mahan entitled "Dyadic Parent-Adolescent Role Confusion Dimensions: Development and Validation of an Observational Coding Scale." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

Jenny Macfie, Major Professor

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**DYADIC PARENT-ADOLESCENT ROLE CONFUSION DIMENSIONS:
DEVELOPMENT AND VALIDATION OF AN OBSERVATIONAL CODING
SCALE**

A Dissertation Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Rebecca Meredith Mahan
December 2020

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ABSTRACT

When parents lack the psychological resources necessary to meet their own emotional and interpersonal needs, they may look to offspring to meet caregiving, social, or romantic needs, which may lead to deviation from typical parent-child roles. Subsequently, a child may attempt to fill this role to maintain significant caregiver attachment and engage in *role confusion*. Three dimensions of role confusion have been proposed: *adolescent as parent*, *adolescent as peer*, and *adolescent as partner*. Existing research demonstrates overall role confusion relates to offspring borderline features, however there is a lack of empirical understanding of how parent-adolescent role confusion dimensions relate to offspring outcomes, namely behavioral problems and borderline features (affective instability, identity disturbance, negative relationships, self-harm/impulsivity; Morey, 1991). There are no existing observational systems to assess all three dimensions among parent-adolescent dyads. Because offspring may internalize and transmit role-confused dynamics intergenerationally, it is important to investigate role confusion dimensions to inform family-based interventions to address problematic family relations. The current study validated a new observational coding scale (*Dyadic Parent-Adolescent Role Confusion Scale, DPARCS*) for assessing the three dimensions of dyadic parent-adolescent role confusion. We validated the DPARCS by establishing criterion and discriminant validity for overall role confusion and dimensions with known groups of maternal diagnostic status and known correlates of adolescent behavioral problems and borderline symptomatology. Specifically, adolescent as parent role confusion uniquely related to adolescent identity disturbance, and adolescent as peer role confusion to adolescent negative relationships. This scale validation provides empirical

support for the importance of examining role confusion dimensions and offers implications for future research and treatment for role confusion, risk factors, and adolescent functioning.

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CHAPTER ONE

INTRODUCTION

When parents lack the psychological resources necessary to meet their own emotional and interpersonal needs, relations between parent and child may become disturbed. According to attachment, object relations, and family systems theories, as reviewed below, in such cases, parents may look to, and depend on, their offspring to meet caregiving, social, or romantic needs in a manner that deviates from typical parent-child roles. Consequently, the child may meet the needs of the parent by attempting to fill this role, a dyadic interaction termed *role confusion* or *role reversal* (Macfie, Brumariu, & Lyons-Ruth, 2015; Minuchin, 1974; Sroufe, Jacobvitz, Mangelsdorf, DeAngelo, & Ward, 1985; Vulliez-Coady, Obsuth, Torreiro-Casal, Ellertsdottir, & Lyons-Ruth, 2013). Three dimensions of role confusion, *child as parent*, *child as peer*, and *child as partner*, have been proposed (Macfie et al., 2015), but there is a lack of available coding systems to assess all three dimensions in adolescence. Further, existing research demonstrates overall role confusion relates to offspring borderline features (Carlson, Egeland, & Sroufe, 2009; Lyons-Ruth, Bureau, Holmes, Easterbrooks, & Hall Brooks, 2013), however, there is a lack of empirical understanding of how parent-adolescent role confusion dimensions relate to offspring outcomes, namely behavioral problems and borderline features. Thus, there is a conceptual and empirical gap in understanding what delineates one type from another, particularly during adolescence. Therefore, the current study aimed to validate a new scale for the measurement of the dimensions of dyadic parent-adolescent role confusion to highlight the unique distinctions between them.

Conceptual and Theoretical Background

Role confusion is represented across the literature using various terms, including “parentification” (Boszormenyi-Nagy & Spark, 1973; Chase, 1999; Flanzraich & Dunsavage, 1977; Jurkovic, 1998), “adultification” (D. Jacobvitz & Sroufe, 1987), “spousification” (Sroufe & Ward, 1980), “boundary dissolution” (Sroufe et al., 1985), and “role-reversal” (Bowlby, 1988; Main, Kaplan, & Cassidy, 1985; M. G. Morris & Gould, 1963). Vulliez-Coady et al. (2013) used “role confusion” as an inclusive term to describe parent-offspring interactions in which the parent and child do not take on typical family roles. We propose that the three types of role confusion, *adolescent as parent*, *adolescent as peer*, and *adolescent as partner*, are empirically distinct dimensions of role confusion and underline unique interactions and impacts in parent-child dyads.

Adolescent as parent, or “parentification,” refers to role confusion in which the child assumes a caregiving role towards the parent (Boszormenyi-Nagy & Spark, 1973; Chase, 1999; Flanzraich & Dunsavage, 1977; Jurkovic, 1998). Adolescent as peer role confusion, or “peer-like relationships” (Sroufe et al., 1985) or “role equalization” (Shaffer & Sroufe, 2005) has been used to describe peer- or sibling-like interactions lacking in structure or discipline between parent and child. Adolescent as partner role confusion, termed as “spousification” (Sroufe & Ward, 1980), “seductiveness” (Sroufe et al., 1985), “child as mate” (Walsh, 1979), and “adultification” (D. Jacobvitz & Sroufe, 1987), involves a child taking the role of a spouse or romantic/domestic partner in receiving intimacy or maintaining reciprocity and equal partnership.

A number of theories contribute to our understanding of the development of parent-child role confusion. In line with the ecological systems model (Bronfenbrenner,

1979), contextual stresses on the proximal and distal factors of a child's environment, such as parental psychological disturbance, may contribute to role confusion. If parents have difficulty providing care for themselves as well as their offspring, they may look to children for their own nurturance. Children may then react and adapt to early environmental failures by developing a *false self*, in which an individual behaves in a manner consistent with environmental expectations (e.g., child as parent) in order to preserve significant attachments (Winnicott, 1965).

Role confusion develops in a dyadic manner, as early as the toddler period (Macfie, Fitzpatrick, Rivas, & Cox, 2008). In order to gain a sense of emotional security (Davies & Cummings, 1994) and/or proximity and attention (Solomon & George, 2011), a child may become controlling in either a caring or punitive parental manner toward the parent, may serve as the parent's peer-like companion, and/or may receive unwarranted intimate affection. According to attachment theory, a child with a disorganized attachment style and limited strategies to cope with a parent's inability to provide comfort and security may in turn meet the parent's relational needs and engage in role confusion, even at the expense of his or her own developmental and emotional needs (Hesse & Main, 2000). Over time, the child is theorized to internalize these relational representations, which may be transmitted across generations from parent to child (Bretherton, 1990; Main et al., 1985). Indeed, D. B. Jacobvitz, Morgan, Kretchmar, and Morgan (1991) found that role-reversal and boundary dissolution transmitted intergenerationally in a sample of grandmothers, mothers, and their offspring. Further, Macfie, Houts, McElwain, and Cox (2005) found that mothers' retrospective reports of childhood role confusion predicted role confusion with their own daughters.

Family systems theory holds that clear and appropriate boundaries between family members are necessary for effective and adaptive family functioning (Minuchin, 1974). As roles in a family unit become unclear, the vertical/hierarchical relationship of authority, support and nurturance between a parent-child dyad becomes more horizontal or equal in the family system, leading to dysfunctional familial relations such as role confusion (Hartup, 1986; Howes & Cicchetti, 1993). In addition to the contributions of ecological, object relations, and attachment theories, Bowen's family systems theory highlights the various roles a child might serve within a family system in order to reduce systematic anxiety and dysfunction (Brown, 1999). These roles can be adaptive or "confused," and include holding together the family's emotional "fusion" (i.e., adolescent as parent), filling a triangulated role during parent romantic conflict (i.e., adolescent as partner), and fulfilling sibling positions (i.e., adolescent as peer; Brown, 1999).

Measurement of Role Confusion

Given there was no known scale to measure dyadic parent-adolescent role confusion dimensions, we informed our scale development and validation by reviewing all existing measures of role confusion identified by Macfie et al. (2015). This list (Macfie et al., 2015) includes scales measuring role confusion using various methodologies, and we focused our review in particular on the observational measures for all periods of developmental. We examined observational measures for various ages in childhood to inform our understanding of role confusion dimensions, role-confused behaviors in both parents and children, and how role-confused interactions evolve over time. For early infancy, our review included the Atypical Maternal Behavior Instrument for Assessment and Classification (AMBIANCE) for confusion and parent "treats child

as sexual spouse/partner” (Bronfman, Parsons, & Lyons-Ruth, 1992-2004). For toddlerhood, we reviewed the Qualitative Ratings of Parent/Child Interactions at 24 and 54 months for parent-child boundary dissolution or overall role confusion (Cox, 1997a, 1997b), a measure that combined two observational measures: caregiver seductive behavior in parent-toddler interactions (i.e., child as partner); and dissolution of generational boundaries, including child as peer and child as parent, in parent-toddler dyads (Sroufe et al., 1985). There are also observational measures for coding child controlling-punitive and controlling-caregiving behaviors (i.e., child as parent) in parent-child interactions in children ages 2 ½ to 4 ½ (Cassidy & Marvin, 1992); age 6 (Main & Cassidy, 1987, 1988); and ages 7 to 9 (Bureau, Easterbrooks, & Lyons-Ruth, 2009).

To understand role confusion closer to the stage of adolescence, we reviewed the Middle Childhood Attachment Strategies Coding System, which includes subscales of child caregiving/role confusion and hostile/punitive behavior in children ages 8 to 12 (Brumariu, Kerns, Bureau, & Lyons-Ruth, 2014). Caregiving/role confusion includes child behaviors of entertaining, reassuring, organizing, and managing the parent (i.e., child as parent) as well as seductive behavior such as flirting or excessive inappropriate touching (i.e., child as partner). Hostile/punitive behavior includes directing, expressing hostility, and being critical, aggressive, frustrated, or demeaning toward the parent (i.e., child as parent). These behaviors are coded on a 9-point scale observed during a conflict-discussion task. The scale was validated in examining associations with other attachment measures, parenting (e.g., psychological control), parent social competences, and child adjustment (social competence, depressive symptoms, behavioral problems; Brumariu et al., 2018). This scale provides informative depictions of child as parent and child as

partner role confusion in middle childhood and information about validation and coding schemes.

We reviewed two observational measures for parent-*adolescent* role confusion that were very informative for scale development. The boundary dissolution measure developed by Shaffer and Sroufe (2005) examines adolescent as parent and adolescent as partner role confusion behaviors during early adolescence in parent-adolescent dyads. This scale examines parent behaviors of adolescent as parent and adolescent as peer in a combined subscale that includes the parent behaving in a silly, immature manner or being overly dependent, and adult-like child behaviors, including the adolescent taking an authoritative stance, providing support, and controlling interactions. The scale also includes a measure of adolescent behaviors for adolescent as parent, which can be combined with the first subscale to provide a dyadic measure of role confusion that includes adolescent as parent and adolescent as peer. Further, the scale includes a dyadic subscale of adolescent as partner was measured by examining physical/seductive boundary dissolution behaviors, including parents' inappropriate behaviors similar to those identified by Sroufe and Ward (1980) with toddlers, such as seductive touching or sensual speaking, with the exception that adolescents might be more actively engaged in the role confusion. Lastly, the scale can combine all three subscales to produce an overall measure of role confusion. These subscales are rated on a 7-point scale and were used during structured tasks between parents and adolescents, including brainstorming, problem solving, and puzzle completion. This scale provides depictions of *dyadic* role confusion for the three dimensions, however it does not include separate subscales of

adolescent as parent and adolescent as peer role confusion, making it difficult to examine distinctions between the two dimensions (Shaffer & Sroufe, 2005).

The second observational scale we reviewed for parent-adolescent role confusion was the Goal-Corrected Partnership in Adolescence Coding System (Lyons-Ruth, Hennighausen, & Holmes, 2005). This scale includes measures of overall parent role confusion toward the adolescent and overall adolescent role confusion toward the parent. The subscale of parent's role confused behavior includes seeking guidance and reassurance from the adolescent and deferring to the adolescent (i.e., adolescent as parent), gossiping about developmentally inappropriate topics and behaving in immature way (i.e., adolescent as peer), and inappropriate touching or stroking and behaving flirtatious toward adolescent (i.e., adolescent as partner). The subscale of an adolescent's caregiving/organizing/entertaining behavior toward the parent includes attempts to take care of and manage the parent (e.g., reassuring, gently scolding), regulate the parent's emotions, and organize the parent (e.g., directing, holding parent accountable for behavior [i.e., adolescent as parent]), as well as entertain the parent (e.g., telling jokes [i.e., adolescent as peer] and demonstrate coy and flirtatious behaviors [i.e., adolescent as partner]). These two subscales may be combined to provide a dyadic measure of role-confusion. These subscales are rated on a 5-point scale and were observed during a 5-minute reunion and 10-minute conflict discussion. Obsuth, Hennighausen, Brumariu, and Lyons-Ruth (2014) validated the scale by examining relations to adolescent gender and verbal intelligence (discriminant), maternal helplessness, adolescent romantic relationship quality, adolescent relational abuse, adolescent depressive and dissociative symptoms, and adolescent overall psychiatric morbidity on a semi-structured interview of

psychiatric disorders. This scale portrays dyadic parent-adolescent role confusion with an overall measure, but does not provide a system for examining role confusion dimensions.

In order to address the gaps of the two adolescent scales, namely the lack of examination of dimensions separately, our goal was to develop a new scale to allow for the distinction between all three parent-adolescent role confusion dimensions. Therefore, similar to Lyons-Ruth et al. (2005) as well as Shaffer and Sroufe (2005), we designed our measure to represent the dyadic nature and interactional quality of role confusion, as supported by attachment, developmental, and family systems theories. We developed an observational measure referred to as the *Dyadic Parent-Adolescent Role Confusion Scale* (DPARCS). We approached scale development using common methodology for developing observational and behavioral coding systems (Chorney, McMurtry, Chambers, & Bakeman, 2015; Heyman, Lorber, Eddy, & West, 2014); specifically, we derived a new system from existing conceptualizations and coding systems in order to address a gap in measurement.

Validation

Cronbach and Meehl (1955) described the method for establishing construct validity to include the examination of known correlates/group differences. To ensure our scale measure role confusion correctly, we summed and standardized the sum of each of the three role confusion subtypes to provide a measure of overall role confusion for each dyad. Thus, we aimed to establish both criterion and discriminant validity for both overall role confusion and role confusion dimensions. In order to validate the DPARCS, we examined factors empirically correlated with overall role confusion and dimensions

based on theory and past research.

Overall Role Confusion

Criterion, or convergent, validity supports construct validity by establishing support for correlations between the construct or variable of interest and correlates, or criteria, which one would expect to be associated with that construct (i.e., known correlates). There are many known correlates of overall role confusion, including parent psychopathology. Macfie, Kurdziel, Mahan, and Kors (2017) found that general role confusion, observed among mothers and their children ages 4 to 7 (Cox, 1997a, 1997b), was greater among mothers with borderline personality disorder (BPD) than among comparison to mothers. BPD is a chronic and severe disorder characterized by a distorted sense of self, emotional dysregulation, risky behaviors, difficulties forming and maintaining relationships, and fear of abandonment (American Psychiatric Association, 2013). Further, O'Connor, Bureau, McCartney, and Lyons-Ruth (2011), in a study of over 1,000 families, found that controlling-caregiving or controlling-punitive attachment patterns and role-confused behavior between mothers and children at age 3 were related to maternal depressive symptoms. Lastly, in both normative (Goglia, Jurkovic, Burt, & Burge-Callaway, 1992; Kelley et al., 2007) and clinical samples (Burnett, Jones, Bliwise, & Ross, 2006) of adult females, parental alcoholism was associated with higher scores of retrospective self-reported childhood role confusion (child as parent and child as mate, as well as parentification). In order to establish criterion validity of the new scale, we examined known group differences for overall role confusion, as known groups validity demonstrates the difference between two groups known to differ on a variable of interest. In the current study, we hypothesized that overall parent-adolescent role confusion would

be greater among dyads with mothers with (a) BPD, (b) lifetime major depressive disorder (MDD), and (c) lifetime alcohol use disorder (AUD).

Among offspring of low-income families at risk for parenting problems, additional studies have found a significant relationship between parent-offspring role confusion and adolescent symptoms of BPD (Carlson et al., 2009; Lyons-Ruth et al., 2013). Overall role-confused behaviors, measured using the GPACS and observed among young adults (mean age = 19.9 years) with their mothers during a conflict discussion task, was greater among offspring with high levels of overall borderline symptoms (Lyons-Ruth, Brumariu, Bureau, Hennighausen, & Holmes, 2015). Further, mother-offspring child as parent role confusion observed at age 8 (Lyons-Ruth et al., 2013), using the Middle Childhood Disorganization and Control scales (Bureau et al., 2009), was related to adolescent/young adult overall BPD symptoms. Borderline symptoms, specifically *borderline features*, include affective instability, identity disturbance, negative relationships, and self-harm/impulsivity, and are highly correlated with a BPD diagnosis (Morey, 1991). In order to further establish criterion validity, we examined known correlates of overall-role confusion, specifically adolescent total borderline features. We hypothesized that overall role confusion would be significantly positively correlated with adolescent total borderline features in the current study.

Discriminant validity is also essential to establish construct validity. Obsuth et al. (2014) examined young adult verbal abilities in relation to observed overall role confusion with their parents (coded using the GPACS) to establish discriminant validity for their scale. They found that adolescent verbal abilities were unrelated to overall role confusion. To establish discriminant validity for overall role confusion in the current

study, we hypothesized that adolescent verbal abilities would be unrelated to overall role confusion.

Role Confusion Dimensions

We aimed to establish criterion validity for role confusion dimensions by demonstrating correlations between dimensions and known correlates. Further, we aimed to establish discriminant validity for role confusion dimensions by demonstrating that a specific dimension accounted for a specific proportion of variance in a specific adolescent borderline features, as expected by theory and previous research, over and above other role confusion dimensions.

Adolescent as Parent. Adolescent as parent role confusion has been related to offspring difficulties with identity development (Fullinwider-Bush & Jacobvitz, 1993; Mayseless & Scharf, 2009; Wells, Glickauf-Hughes, & Jones, 1999), a significant issue during adolescence, when offspring begin to make independent decisions and decrease reliance on parents for guidance (Arnett, 2001; Blos, 1962). Among a sample of undergraduate female students (mean age 20 years), Fullinwider-Bush and Jacobvitz (1993) found that women who retrospectively reported parent-child interactions with mothers in which as children they took the role of parent to their parents (measured using the Family Relationships Questionnaire) engaged in less exploration in their commitments to careers and romantic relationships as adults, and instead they based their values and expectations on their parents' values. Furthermore, Wells et al. (1999) found that undergraduate students' retrospective reports of taking on a parental role (measured using the Parentification Questionnaire) were related to the students' endorsements of codependent traits, including being other-oriented, over-conforming, self-sacrificing,

caretaking, and prone to shame. We hypothesized that adolescent as parent role confusion would be positively associated with adolescent identity disturbance in the current study. Further, we expected adolescent as parent role confusion to account for a significant proportion of variance in the adolescent borderline feature of identity disturbance over and above the other dimensions of role confusion.

Adolescent as Peer. When a mother intrudes on the social life of her adolescent offspring (i.e., by moving down to a level of adolescent maturity), or if an adolescent becomes involved in or pulled into adult social life, adolescent affective and interpersonal functioning may be disturbed. Indeed, Shaffer and Egeland (2011) found that observed peer-like relationships between adolescents and their mothers were correlated with negative psychosocial outcomes in offspring, including externalizing problems. Further, A. S. Morris, Silk, Steinberg, Myers, and Robinson (2007) identify parental modeling (Bandura, 1977) as well as social referencing or cues (Saarni, Mumme, & Campos, 1998) as critical in the development of emotion regulation. Consequently, mothers engaged in peer-like relationships with their adolescents may deprive adolescents of modeling of healthy interpersonal and affective functioning. In the current study, we hypothesized that adolescent as peer role confusion would be significantly positively correlated with adolescent (*a*) affective instability, (*b*) negative relationships, and (*c*) externalizing behaviors. Further, given empirical evidence of the relation between adolescent as peer role confusion and adolescent relational problems, we expected adolescent as peer role confusion to account for a significant proportion of variance in adolescent negative relationships over and above the variance predicted by other role confusion dimensions.

Adolescent as Partner. An inappropriate partnership with a mother may inhibit the development of healthy understanding of physical and relational boundaries, particularly in relation to intimacy, an important area of developmental growth during the stage of adolescence. If a mother attempts to meet her romantic and relational needs by keeping her child in close physical and emotional proximity, her child may have limited opportunities for peer interactions necessary for informing healthy relational development. Indeed, Sroufe, Bennett, Englund, Urban, and Shulman (1993) found that mother-child seductive behavior (i.e., child as partner role confusion) observed at 24 months and at 42 months was related to observed offspring gender boundary violations with peers at ages 10-11. Further, Perrin, Ehrenberg, and Hunter (2013) found that child as partner role confusion retrospectively reported by young adults correlated with relational anxiety and relational depression.

Parents engaging in a partner-like relationship with their children may also fail to teach and model strategies for maintaining proper boundaries and regulating distress. D. Jacobvitz and Sroufe (1987) theorized that mother's intrusive and over-arousing behavior distracts the child from task completion and taxes emotional and behavioral development as early as the toddler period. Indeed, they found mothers' seductive care toward their infants and toddlers predicted offspring hyperactivity at age 5 or 6 (D. Jacobvitz & Sroufe, 1987). Intrusive and over-arousing behaviors from parents who act with their adolescents in a partner-like role likely overwhelm offspring capacities to attend to the environment as well as to their own emotional experiences, potentially contributing to difficulties maintaining attention and regulating internal emotional distress. In the current study, we expected that adolescent as partner role confusion would be positively

associated with adolescent (*a*) affective instability, (*b*) negative relationships, (*c*) anxious/depressed problems, and (*d*) attention problems. More specifically, we predicted adolescent as partner role confusion to account for a significant proportion of variance in the adolescent borderline feature of affective instability over and above the other role confusion dimensions.

The Current Study

The present study aimed to validate a model differentiating the three dimensions of dyadic role confusion (adolescent as parent, adolescent as peer, adolescent as partner) among a sample of mothers and their adolescent offspring. To assess parent-adolescent role confusion dimensions in the current study, we developed and validated an observational measure, as no existing measures consider dimensions of role confusion among parent-adolescent dyads using dyadic measurement (i.e., including both parent and adolescent behavior). The nine hypotheses detailed above and summarized below reflect the goal of obtaining criterion and discriminant validity for overall role confusion and dimensions.

We predicted the following: *Hypothesis 1*: Overall parent-adolescent role confusion would be greater among dyads with mothers with (*a*) BPD, (*b*) lifetime MDD, and (*c*) lifetime AUD; *Hypothesis 2*: overall role confusion would be significantly positively correlated with adolescent total borderline features; *Hypothesis 3*: adolescent verbal abilities would be unrelated to overall role confusion, to demonstrate *discriminant validity*; *Hypothesis 4*: adolescent as parent role confusion would be significantly positively associated with adolescent identity disturbance; *Hypothesis 5*: adolescent as peer role confusion would be significantly positively correlated with adolescent (*a*)

affective instability, (b) negative relationships, and (c) externalizing behaviors;

Hypothesis 6: adolescent as partner role confusion would be significantly positively associated with adolescent (a) affective instability, (b) negative relationships, (c) anxious/depressed problems, and (d) attention problems; *Hypothesis 7:* adolescent as parent role confusion would account for a significant proportion of variance in the adolescent identity disturbance over and above the other dimensions of role confusion; *Hypothesis 8:* adolescent as peer role confusion would account for a significant proportion of variance in adolescent negative relationships over and above the variance predicted by other role confusion dimensions; *Hypothesis 9:* adolescent as partner role confusion would account for a significant proportion of variance in the adolescent borderline feature of affective instability over and above the other role confusion dimensions.

CHAPTER TWO

METHOD

Participants

The current sample consisted of 56 adolescents age 14-18 years ($M_{age} = 15$ years 5 months, $SD = 1$ year 2 months) and their biological mothers. Of the mothers, there were 28 with a current diagnosis of BPD and 28 matched comparisons with no present BPD diagnosis. Half of the adolescent sample was female, and there were equal numbers of males and females in both groups. The sample was from a low socioeconomic population, and the ethnic backgrounds of the sample reflected those of the local community, 92% Caucasian, 7% ethnic minority, and 4% Hispanic. See Table 1 for demographic data collected from mothers using the Mt. Hope Family Center's Interview protocol (Mt. Hope Family Center, 1995).

Participants were recruited from a five-county region of the United States that included both rural and urban areas, as part of a larger study. Researchers distributed brochures explaining the symptoms of BPD and the details of the larger study to local clinicians at presentations on the treatment of BPD. Further, researchers requested clinicians to refer clients whom they believed might have a diagnosis of BPD and who had an adolescent age 14-18. In addition, researchers distributed two different types of flyers, one calling attention to mothers of adolescents who struggle with issues common to those diagnosed with BPD, and another requesting comparison mothers of adolescents. Researchers distributed these flyers to mothers at local schools, sporting events, and recreation centers and posted flyers in the community to recruit mothers for both groups. Both mother and adolescent participants received compensation for participation.

Procedures

Researchers initially scheduled a home visit or meeting at a public place of the mother's choosing with participants. During the initial visit, two research assistants obtained informed consent for the mother and assent for the adolescent and administered a demographic interview and a self-report screener for BPD symptoms to the mother. The mother and adolescent then scheduled and attended a laboratory visit at which the mother completed a structured clinical interview; the adolescent completed self-report questionnaires on borderline features and a test of verbal ability. Further, the mother and adolescent completed ratings on topics of conflict between the dyad using the Relationship Problem Inventory (Knox, 1971). This measure has been used to identify issues of conflict among marital couples and was adapted to determine topics of disagreement among mother-adolescent dyads for the current study. A research assistant provided mothers and adolescents, separately, a list of common areas of conflict that occur between parents and adolescents (e.g., grades, household chores, friends) and requested they identify and mark the issues that cause the most conflict between the dyad. Researchers then selected three of the marked topics: one rated by the adolescent, one rated by the mother, and one rated by both. For each topic, a research assistant asked the dyad to "come up with a solution" for the specific topic of conflict. The dyad was provided 5 minutes to discuss each topic during filmed discussions.

Measures

Dyadic Parent-Adolescent Role Confusion Scale (DPARCS)

The DPARCS combines frequency, duration, intensity, and quality of role-confused behaviors of both the parent and the adolescent in their interactions. There are

three dimensions of role confusion: *adolescent as parent*, including descriptions of behaviors of parental deference, adolescent directing the parent, child-like parent behavior, and adolescent serving as a responsible and secure base; *adolescent as peer*, including descriptions of behaviors of equality and power balance or struggle, immature and non-disciplinary parent, contemporary peers, and inappropriate shared experiences; and *adolescent as partner*, including descriptions of behaviors of sexualized behavior, intellectual partnership and mutual reciprocity, and triangulation. Each dimension receives a single rating based on a Likert-type scale (1 = clarity of roles, 2 = low role confusion, 3 = moderate role confusion, 4 = high role confusion, 5 = very high role confusion), as it is possible for a parent-adolescent dyad to exhibit more than one type of role confusion (see Appendix for full DPARCS manual). The DPARCS is applicable to various interactional situations between a parent and an adolescent (e.g., conflict discussion). We also standardized each dimension score and summed them to create a variable of overall parent-adolescent role confusion.

Scale Development. We created the DPARCS using common methodology for observational coding system development (Chorney et al., 2015; Heyman et al., 2014). To begin the process of scale development for the DPARCS, two research assistants, trained by an assistant with experience in coding as well as through consultation with an expert on role confusion, selected 20 measures of role confusion reported by Macfie et al. (2015) to develop a scale pool. The measures selected included role confusion and dimensions (e.g., parentification) across different ages. Seven measures from the list were excluded due to inability to access the narrative descriptions. In addition to observational scales, we included adult retrospective semi-structured instruments and

questionnaires, parent/caregiver semi-structured interviews, and caregiver and child self-report questionnaires, in order to ensure complete representation and delineation of the dimensions (see Appendix, DPARCS, Table 1 for full list of measures).

We compiled the narrative descriptions, statements, and items from these measures into a large ‘scale pool.’ We sorted descriptions into two categories: role confusion, or irrelevant. Irrelevant descriptions were discarded due to lack of connection with parent-adolescent role confusion due to age irrelevancy (e.g., parent behavior appropriate for toddlers or childhood but not adolescents) or being identified as a separate concept (e.g., parent intrusiveness). We sorted the descriptions in the relevant pool into three categories: adolescent as parent, adolescent as peer, and adolescent as partner role confusion. We made decisions about best fit based on existing operational definitions of the three constructs. For difficult cases, research assistants consulted with one another, with existing literature and operationalizations, and with an expert on role confusion about best fit. As we sorted descriptions into each of the three dimensions, themes and behaviors emerged. Therefore, we created clusters within each of the three dimension categories in order to delineate and organize the observations and experiences of the dyads.

To determine the ratings for a Likert-type scale for the DPARCS, we created another pool that included all the descriptive ratings from each observational coding scale. We used a similar process as described above to refine the relevant descriptions. We decided to use a 5-point Likert-type scale, consistent with a number of existing scales.

Prior to implementing the scale in coding behavioral data, research assistants

applied the DPARCS to practice videos to conduct pilot work to allow for any necessary scale refinement. Using a list of exemplar videos developed from a previous study using the current sample, four videos were selected as reference examples for low, moderate, and high ratings of role confusion dimensions using the Likert-type scale of the DPARCS. The two research assistants watched and coded these videos simultaneously and discussed their observations and the rating process. The drafted coding system was revisited and revised based on fit with the behavioral data.

Coding. The training for coding with the DPARCS consisted of familiarization with the construct and the literature as well as practice using the coding scale with others. In order to train for coding using the DPARCS, two research assistants became familiar with the role confusion literature, conceptualizations, and existing measures of role confusion (via the process of scale development). Further, the two research assistants independently coded seven non-sample parent-adolescent discussions and later discussed the coding process and their ratings together. The coders were blind to maternal diagnostic status and to all validity hypotheses during all scale development, training, and coding procedures. Research assistants coded the remainder of the sample separately. We obtained interrater reliability using 25% ($n = 14$) of the current sample, not including the exemplar tapes used for training. Scores were generated for each of the three role confusion dimensions using intraclass correlation coefficients in this study: adolescent as parent, $r_1 = 0.81$; adolescent as peer, $r_1 = 0.78$; and adolescent as partner, $r_1 = 0.73$.

Validity Measures

Maternal BPD

The Structured Clinical Interview for DSM-IV Personality Disorders (SCID-II; First, Gibbon, Spitzer, Williams, & Benjamin, 1997) is a semi-structured interview used in the current study to diagnose personality disorders, specifically BPD. After mothers completed the self-report SCID-II Personality Disorders Questionnaire (First et al., 1997), a licensed clinical psychologist administered the SCID-II interview to mothers to assess for a diagnosis of BPD. The SCID-II has empirical support for inter-rater reliability and internal consistency for the structural assessment of BPD diagnosis based on DSM-IV criteria (Lobbestael, Leurgans, & Arntz, 2011; Maffei et al., 1997).

Maternal MDD

The Structured Clinical Interview for DSM-IV-TR Axis I Disorders (SCID-I; First, Gibbon, Spitzer, & Williams, 1996) is a semi-structured interview that was administered by a licensed clinical psychologist to mothers to assess for DSM-IV dichotomous diagnosis of MDD. The SCID-I for MDD has good inter-rater reliability kappa scores, ranging between 0.66 and 1.00 (First, Gibbon, Spitzer, & Williams, 2002; Lobbestael et al., 2011).

Maternal Alcohol Use

The SCID-I (First et al., 1996), which was administered to mothers by a licensed clinical psychologist, was also used to assess for a categorical indicator of alcohol abuse/dependence for the purpose of scale validation. The SCID-I for alcohol abuse/dependence has good inter-rater reliability kappa scores, 0.65 (Lobbestael et al., 2011).

Adolescent Verbal Abilities

The Peabody Picture Vocabulary Test-III (PPVT-III; Dunn & Dunn, 1997) is a test of receptive language and verbal ability. Adolescent verbal ability, determined by standard scores on the PPVT-III, was used as a variable in determining discriminant validity for scale validation.

Adolescent Borderline Features

The Personality Assessment Inventory (PAI; Morey, 1991) is a self-report inventory that was completed by adolescents to evaluate personality characteristics and psychopathology, specifically borderline features. The Borderline Features Scale of the PAI (PAI-BOR) includes 24 items rated on a 4-point Likert scale (*false, slightly true, mainly true, or very true*). The PAI-BOR provides four subscale scores, one score for each borderline feature (affective instability, identity disturbance, negative relationships, and self-harm/impulsivity) as well as a score for the total borderline features scale calculated from the total of the four subscales. The PAI-BOR is a validated method for evaluating borderline specific pathology and has support for criterion (Stein, Pinsker-Aspen, & Hilsenroth, 2007) and convergent (Kurtz & Morey, 2001) validity. Internal consistency for the current sample, measured using Cronbach's alpha, was high to moderate for adolescent affective instability ($\alpha = .83$), identity disturbance ($\alpha = .67$), negative relationships ($\alpha = .69$), self-harm/impulsivity ($\alpha = .80$), and total borderline features ($\alpha = .90$).

Adolescent Behavior Problems

The Youth Self Report for Ages 11-18 (YSR; Achenbach & Rescorla, 2001) is used to measure emotional and behavioral problems in adolescents. On this 113-item

questionnaire, adolescents rate each item as occurring now or within the past 2 months on a 3-point Likert scale (0 = not true, 1 = somewhat or sometimes true, 2 = very true or often true). The YSR produces an internalizing total score, consisting of the sum of scores on the withdrawal, somatic complaints, and anxiety/depression subscales, and an externalizing total score, comprised of the sum of scores on the social problems, thought problems, attention problems, aggressive behavior, and delinquent behavior subscales. There is evidence for high test-retest reliability for the YSR internalizing ($r = 0.80$) and externalizing ($r = 0.89$) scales in a community sample (Achenbach & Rescorla, 2001). There was good internal consistency in the current sample for both internalizing Problem ($\alpha = 0.81$) and externalizing Problems ($\alpha = 0.85$).

Statistical Analyses

Overall Role Confusion

To test criterion validity for overall role confusion using known group differences, we conducted three one-way analyses of variance (ANOVAs) for each group (maternal BPD, maternal lifetime MDD, and maternal lifetime AUD) to examine how each differed in degree of role confusion (*Hypothesis 1*). Maternal BPD, maternal lifetime MDD, and maternal lifetime AUD each served as the independent variables in one of the analyses, and overall parent-adolescent role confusion served as the dependent variable. To further examine criterion validity through known correlates of overall role confusion, we conducted a zero-order correlation to examine association between overall parent-adolescent role confusion and adolescent total borderline features (*Hypothesis 2*). To test discriminant validity for overall role confusion, we conducted a zero-order correlation between overall role confusion and adolescent verbal abilities (*Hypothesis 3*).

Role Confusion Dimensions

In order to assess criterion validity for role confusion dimensions (*Hypothesis 4, 5, and 6*), we conducted zero-order correlations between parent-adolescent role confusion dimensions and adolescent borderline features (total, affective instability, identity disturbance, and negative relationship) and behavioral problems (internalizing, withdrawn/depressed, somatic complaints, anxious/depressed, externalizing, social problems, thought problems, attention problems, aggressive behavior, and delinquent problems).

To test discriminant validity for role confusion dimensions, we conducted three hierarchical multiple regression analyses. In the regression to examine how adolescent as parent role confusion would account for a significant proportion of variance in adolescent identity disturbance over and above the other role confusion dimensions (*Hypothesis 7*), adolescent identity disturbance was the dependent variable. In Step 1, we entered adolescent as peer and adolescent as partner role confusion as the independent variables, and in Step 2, we additionally added adolescent as parent role confusion as the independent variable.

In the regression to examine how adolescent as peer role confusion would account for a significant proportion of variance in adolescent negative relationships over and above the variance predicted by other role confusion dimensions (*Hypothesis 8*), we entered adolescent negative relationships as the dependent variable. In Step 1, we entered adolescent as parent and adolescent as partner role confusion as the independent variables, and in Step 2, we additionally added adolescent as peer role confusion as the independent variable.

In the regression to examine how adolescent as partner role confusion would account for a significant proportion of variance in adolescent affective instability over and above the other role confusion dimensions (*Hypothesis 9*), we entered adolescent affective instability as the dependent variable. In Step 1, we entered adolescent as parent and adolescent as peer role confusion as the independent variables, and in Step 2, we additionally added adolescent as partner role confusion as the independent variable.

CHAPTER THREE

RESULTS

Distributions of the Data

Prior to testing hypotheses, the normality of the distributions of role confusion dimensions and the psychopathology and psychological functioning of the sample were examined. For all three role confusion dimensions, the distributions of the data were symmetrical or minimally skewed in a positive direction and had platykurtic kurtosis, indicating less outliers and more of a uniform distribution (Sheskin, 2004). See Table 2 for parameters.

Because half our sample included high-risk dyads with mothers with BPD, and because our analyses assumed normal distribution of variables, we examined the distribution of the sample in relation to psychopathology and psychological adjustment to ensure there was an even distribution of low, moderate, and high functioning mothers and that the sample represented the general population of psychological adjustment. As part of the structured clinical interviews, a licensed clinical psychologist scored mothers on the Global Assessment of Functioning (GAF) scale. Mothers varied on their GAF scores, with overall half the sample scoring in a range characterized by the presence of moderate to mild symptoms. There were also a number of mothers who scored in a range indicating minimal to no symptoms. Statistical parameter analysis indicated a symmetrical distribution for maternal GAF scores (skewness = 0.11), indicating mothers have a normal distribution of psychological functioning and adjustment. Further, while half the mothers in the current sample had a diagnosis of BPD, 73.2 percent had an Axis I

diagnosis and 26.8 percent had no Axis I or II diagnosis, indicating a broad range of psychological functioning. See Table 1 for frequencies of the maternal sample.

Overall Role Confusion

Results of criterion validity testing for overall role confusion using known group differences (*Hypothesis 1*) revealed significant main effects for maternal group status for (a) maternal BPD and (c) maternal lifetime AUD, with more role confusion among dyads with mothers with these disorders than among comparison dyads. Further, there was a marginally significant main effect for (b) maternal lifetime MDD, with more role confusion among dyads with mothers with lifetime MDD than among comparison dyads (see Table 3 for main effects, means, standard deviations, and group numbers). Results support criterion validity for the DPARCS measure of overall role confusion given significant group differences among mothers with and without diagnoses of BPD, AUD, and MDD. Further results revealed a significant correlation between overall role confusion and adolescent total borderline features (*Hypothesis 2*; see Table 4 for correlation coefficient, mean, and standard deviation). The association between overall role confusion and adolescent total borderline features provides further criterion validity for the DPARCS measure of overall role confusion. In establishing discriminant validity for overall role confusion, as predicted, results revealed a non-significant association between overall role confusion and adolescent verbal abilities ($M = 107.43$, $SD = 9.92$), $r = 0.02$, *ns* (*Hypothesis 3*).

Role Confusion Dimensions

In testing criterion validity for role confusion dimensions, as predicted, adolescent as parent role confusion was significantly correlated with adolescent identity disturbance

(*Hypothesis 4*); adolescent as peer role confusion was significantly correlated with adolescent (a) affective instability, (b) negative relationships, and (c) externalizing problems (*Hypothesis 5*); and adolescent as partner role confusion was significantly positively associated with adolescent (a) affective instability, (b) negative relationships, and (c) attention problems (*Hypothesis 6*). Partially supporting predictions, adolescent as partner was also marginally positively associated with adolescent (d) anxious/depressed problems (see Tables 4 and 5 for correlation coefficients, means, and standard deviations). Results of significant correlations between role confusion dimensions and adolescent borderline features and behavioral problems provide support for criterion validity for the DPARCS measures for dimensions of role confusion.

In testing discriminant validity for role confusion dimensions, results revealed that adolescent as parent role confusion significantly accounted for 10% of the variance in adolescent identity disturbance over and above the other role confusion dimensions (*Hypothesis 7*; see Table 6 for coefficients and significance tests). Partially supporting the hypothesis, adolescent as peer role confusion accounted for a marginally significant 5% of the variance of adolescent negative relationships over and above other role confusion dimensions (*Hypothesis 8*; see Table 7 for coefficients and significance tests). Contrary to expectations, however, adolescent as partner role confusion did not account for adolescent affective instability, as it accounted for an insignificant 4% of the variance in adolescent affective instability over and above other role confusion dimensions (*Hypothesis 9*; see Table 8 for coefficients and significance tests).

CHAPTER FOUR

DISCUSSION

The current study addressed a gap in the measurement and examination of parent-adolescent role confusion dimensions (adolescent as parent, adolescent as peer, adolescent as partner). Dyadic parent-adolescent role confusion has been measured using observational coding systems that assess (1) overall role confusion with no distinction between dimensions (Lyons-Ruth et al., 2005), and that assess (2) all three dyadic parent-adolescent role confusion dimensions without distinction between of adolescent as parent and adolescent as peer role confusion (Shaffer & Sroufe, 2005). The theoretical and conceptual backgrounds of role confusion highlight the distinctiveness of these dimensions, signifying the importance of examining each dimension and its relations to offspring outcomes. Further, empirical evidence of the association between overall role confusion and adolescent borderline features (Carlson et al., 2009; Lyons-Ruth et al., 2013) is limited by the lack of understanding of how each role confusion dimension relates to adolescent borderline features. Consequently, we developed the DPARCS with reference to existing coding systems and conceptualizations and validated the scale in order to allow for further examination of dyadic parent-adolescent role confusion dimensions.

Overall Role Confusion

In order to establish criterion validity for overall role confusion as measured by the DPARCS, we first examined differences among groups known to differ in overall role confusion, specifically mothers with and without diagnoses of BPD, AUD, and MDD. Our results indicated significant differences between dyads of mothers with BPD and

lifetime AUD, with dyads of mothers meeting criteria for these diagnoses demonstrating more role-confused behaviors than comparison mothers. Results revealed a similar pattern with marginal significance in dyads of mothers with lifetime MDD. Further, these results provide observational support for previous findings that parent-child role confusion is related to maternal BPD (Macfie et al., 2017), AUD (Burnett et al., 2006; Goglia et al., 1992; Kelley et al., 2007), and MDD (O'Connor et al., 2011). Future work might go beyond the current validation procedures and examine how maternal diagnoses relate to the dimensions of role confusion, which could inform the development of interventions for maladaptive family dynamics in at risk parent-adolescent dyads. For example, future research may use the DPARCS to investigate how the occurrence of role confusion dimensions between mothers with and without BPD, or other disorders, differs and the role maternal pathology plays in the relation between role confusion dimensions and adolescent borderline features and behavioral problems.

Next, we established criterion and discriminant validity for overall role confusion by examining variables of adolescent functioning known to correlate and not correlate with parent-adolescent role confusion. In addition to results demonstrating a nonsignificant correlation between overall role confusion and adolescent verbal abilities and supporting discriminant validity, results also revealed a significant positive correlation between overall parent-adolescent role confusion and adolescent total borderline features. This is consistent with previous findings that adults with BPD retrospectively reported more childhood experiences of role confusion than did adults with other psychopathology (Zanarini et al., 1997). Indeed, as role confusion may increasingly characterize the typical interactions between a parent-child dyad over time, a

child may develop unhealthy interpersonal models or conceptions of self and others (Bowlby, 1980), which may impair later functioning in areas of emotion regulation, intimacy, and relationships. Because offspring who engaged in role confusion with parents are more likely to report borderline symptoms during late adolescence/emerging adulthood (Lyons-Ruth et al., 2015), when BPD is first diagnosed (Bradley, Conklin, & Westen, 2005), role confusion among parent-adolescent dyads may be a potential contributing factor to the development of BPD. This is an important area for future investigation in gaining further understanding about the role of specific types of parent-adolescent dynamics (e.g., adolescent as parent in contrast to adolescent as peer) in the development of BPD.

Adolescent as Parent

After obtaining support for the DPARCS as a valid measure for overall role confusion, we examined scale criterion and discriminant validity for the assessment of role confusion dimensions. To do this, we examined each dimension in relation to adolescent behavioral and borderline symptomatology. As predicted, results revealed a significant positive correlation between adolescent as parent role confusion and adolescent identity disturbance, supporting criterion validity. Further, results indicated adolescent as parent role confusion uniquely accounted for a significant proportion of the variance in adolescent identity disturbance over and above the other role confusion dimensions (adolescent as peer, adolescent as partner), supporting discriminant validity. This is consistent with recent research conducted by Mayseless and Scharf (2009), who found, among a sample of Israeli adolescent females, that reports of serving a parental

role (measured using the Inadequate Boundaries Questionnaire) was associated with over-dependency and lack of individuation from parents.

These results are consistent with theoretical understanding of identity development. From a developmental perspective, in order to care for the parent, and in turn care for him- or herself, an adolescent may need to manage distressing emotions in themselves and in the parent, interrupting mastery over salient developmental milestones and permitting no time or opportunities for self development (Erikson, 1959). With identity formation being the key milestone of the adolescent stage (Erikson, 1959), offspring engaging in adolescent as parent role confusion may become overwhelmed beyond their developmental capacities, preventing mastery of psychosocial stages and increasing vulnerability for developing BPD and other personality disorders with impairments in identity and self-direction. Further, unmet emotional and relational needs are theorized to impair the development of a cohesive sense of self (Kohut, 1971) as well as age-appropriate autonomy and individuation (Mahler, 1971).

In regards to implications for treatment, these results may be useful in informing therapeutic awareness to the potential for issues surrounding identity development and sense of self in instances of high adolescent as parent role confusion, presently or according to retrospective report. If identity issues appear to be a major area of impairment in the context of this role confusion dimension, exploratory, insight-oriented or psychodynamic psychotherapy may be beneficial for better understanding one's sense of self, particularly in relation to significant caregivers (Shedler, 2012). More specifically, because the ability to mentalize, or think about the mental states of self and other, is fostered by early attachments and social environments and has significant

contributions to the development of self-organization (Fonagy & Target, 1997), mentalization-based treatment (Fonagy & Bateman, 2007) may be beneficial in helping individuals better understand their relational patterns with themselves and others in the context of past or current adolescent as parent role confusion. Addressing impairments in one's self-concept is critical, as problems with identity development are theorized to be a significant aspect of BPD development (Masterson & Klein, 1989; Masterson & Rinsley, 1975).

Adolescent as Peer

In establishing validity for adolescent as peer role confusion as measured by the DPARCS, results indicated a significantly correlated with adolescent borderline features of affective instability and negative relationships as well as with adolescent externalizing problems, and marginally with adolescent delinquent behavior, providing support for criterion validity. For discriminant validity, results revealed adolescent as peer role confusion marginally accounted for a proportion of the variance in adolescent negative relationships over and above other role confusion dimensions. This indicates that parents who violate typical parent-adolescent boundaries and behave in a more peer-like manner with their offspring may be likely to fail to teach and model adaptive strategies for regulating distress and structuring healthy social relations. Indeed, emotion regulation and the ability to understand the internal experience of self and other (i.e., social cognition or mentalization) is highly relevant for the development of healthy peer relationships and social knowledge (Fonagy & Allison, 2012).

The occurrence of past or present adolescent as peer role confusion, because it relates to problems surrounding chaotic relational patterns and self-harming or acting out

behaviors, may be addressed through transference-focused psychotherapy (Clarkin, Yeomans, & Kernberg, 2006) or psychodynamic psychotherapy (Shedler, 2012). Such interventions may increase one's understanding of representations of self and other and how this connects to thinking and feeling about and behaving in relationships. Further, adolescents or adults who have been engaging in a peer-like role confusion relationship, at present or in the past, with a caregiver and who may be experiencing more severe impairments in emotion regulation and meaningful relationships may initially benefit from more structured interventions such as dialectical behavior therapy (DBT; Linehan, 1987; Linehan, Miller, & Addis, 1989) in order to improve distress tolerance and decrease relational conflict. Future clinical research may investigate how to address ongoing adolescent as peer, or overall or any dimensional, role confusion between adolescents and their caregivers through DBT for adolescents with a more family systems orientation focused on the family unit and engagement in family therapy and coaching to improve relations between parents and caregivers (Miller, Glinski, Woodberry, Mitchell, & Indik, 2002; Woodberry, Miller, Glinski, Indik, & Mitchell, 2002).

Adolescent as Partner

In the final examination of the differences between role confusion dimensions, we examined the validity of adolescent as partner role confusion. Results revealed that adolescent as partner role confusion was significantly correlated with adolescent affective instability and negative relationships as well as with adolescent attention problems, and marginally with adolescent anxious/depressed problems, supporting criterion validity. Contrary to expectations, adolescent as partner role confusion did not account for a significant proportion of the variance in adolescent affective instability over and above

other dimensions, limiting the discriminant validity of the measure of this subtype.

Although we did not obtain support for discriminant validity for adolescent as partner role confusion through a regression, this dimension did not significantly correlate with any unpredicted adolescent borderline features or behavioral problems. This provides some support for adolescent as partner role confusion as measured by the DPARCS as relating to adolescent symptomatology as evidenced in research conducted using other scales and at different ages across childhood.

In our sample, the occurrence of all role confusion dimensions at the high end of the DPARCS (i.e., very high role confusion) was not common and adolescent as partner role confusion was specifically not coded at the “very high” end of the scale. The lack of observation of very high adolescent as partner role confusion may have interfered with the likelihood of identifying significant results. The absence of a very high rating for this dimension may be due to the uniqueness of the sample and of each dyad, as there were dyads that displayed adolescent as parent and adolescent as peer, but not adolescent as partner, role confusion dimensions at the high end of the DPARCS. In order to better observe adolescent as partner role confusion at its high range and in how it relates to adolescent functioning, future research should utilize larger sample sizes in order to obtain better depth and breadth of this dimension. Further, because role confusion at a very high level is abnormal in parent-adolescent dyads and indicates severely impaired parent-adolescent relations, future research should utilize high-risk samples of parent-adolescent dyads. Further, our sample did not include fathers. Therefore, it is important for future research to examine how gender and role confusion with fathers plays a role in the occurrence of role confusion dimensions and the correlates to adolescent functioning.

Specifically, it would be of interest to examine how gender differences relate to adolescent as partner role confusion, as adolescence is a developmental period of increased maturation in areas of cognition, intimacy, and sexual development and interest to which parents must adjust (Steinberg & Morris, 2001).

Strengths and Limitations

The current study demonstrates a number of strengths. First, we assessed for role confusion and its dimensions using observational methods of coding mother-adolescent interactions. This methodology offers direct observation of interactions between the mother-adolescent dyad in which role confusion dimensions occur. Second, while our sample was normally distributed in regards to psychological adjustment, functioning, and pathology, fifty percent of our sample included high-risk dyads with mothers with severe and persistent psychopathology. This inclusion allowed us to observe an abnormal parent-adolescent dynamic enactment that is less likely to occur among dyads functioning at higher levels of psychological health. Third, we measured role confusion and dimensions according to the dyadic interaction between the mother and adolescent, rather than assessing for the mother and adolescent behaviors separately. This methodology is consistent with attachment and family systems approaches, as family or dyad interactions are considered to be co-created experiences involving multiple parties and that are the unit of study in developmental observational research. Fourth, this is the first study to provide observational examination of the three role confusion dimensions among mother-adolescent dyads. Examination of each dimension in the current study allows for delineation of the dimensions and provides a foundation for future research to examine and further understand each dimension and its relations to parent and adolescent

functioning. Lastly, the current study successfully demonstrated validation for the DPARCS by establishing criterion and discriminant validity in known groups and in known correlates of maternal diagnostic status and adolescent behavioral problems and borderline symptomatology. Through the validation process, the current study revealed unique relationships between adolescent as parent role confusion and adolescent identity disturbance, as well as between adolescent as peer role confusion and adolescent negative relationships. This research provides empirical support for the inclusion of a scale measuring the three dimensions as distinct given evidence of significant associations with each dimension to impaired adolescent functioning.

There are some limitations to the current study. First, we were unable to test convergent validity in the current study, as we did not compare our measurement of role confusion and dimensions using the DPARCS with other measures of role confusion, providing a limitation to establishing construct validity. Future research that utilizes the DPARCS may provide further validation of the scale by assessing role confusion and dimensions using additional self-report, structured interview, or observational methodologies and confirming the accuracy of the DPARCS in measuring role confusion dimensions. Second, the current sample included a majority of Caucasian participants and did not fully represent parents and adolescents from minority backgrounds. Future validation of the measure should extend the examination of role confusion dimensions to samples that include participants from diverse and minority backgrounds to reflect the overall population and provide further generalizability for the current findings. Third, the effect sizes for the amount of variance accounted for in adolescent identity disturbance

and negative relationships by the role confusion dimensions are very small. While significant, further examination of these effects would provide additional support.

Summary

The confusion of roles between parents and adolescents has been observed and theorized to manifest in unique and distinct patterns. The current study provided validation for a new method of measurement that distinguishes between parent-adolescent interactions characterized by adolescent as parent, adolescent as peer, or adolescent as partner role confusion through the demonstration that each parent-adolescent dynamic dimension relates to unique problems in adolescents. Due to the occurrence and harmful effects of this dynamic in high-risk parent-adolescent dyads, further research aimed at further understanding role confusion is needed (Macfie et al., 2015). Moreover, improving our understanding of how high-risk dyads may enact specific role-confused interactional patterns (i.e., adolescent as partner vs. adolescent as peer) and the devastating effects of these dimensions on offspring psychological functioning can inform therapeutic interventions with adult offspring of role-confused family dynamics as well as parent-adolescent dyads currently enacting role confusion to develop healthy family functioning. Ultimately, these efforts have the potential to help role-confused adolescents and adults become more balanced and secure in their identities, relationships and emotionality and prevent the transmission of these problematic family patterns and resulting personality disturbances to future generations.

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APPENDIX

Table 1. Demographic Information of Whole Sample ($N = 56$)

Variable	$M (SD)$
Adolescent age (years)	15.41 (1.19)
Family yearly income (\$)	26,876 (17,119)
Number of adults in home	1.80 (0.72)
Number of children in home	2.36 (1.53)
	%
Adolescent sex (female)	50
Adolescent ethnic minority	7
Adolescent Hispanic	4
Maternal marital status (single)	30
Maternal Global Assessment of Functioning	
≤ 50 (serious symptoms and impairments)	30.4
51 – 80 (moderate to mild symptoms)	57.1
≥ 81 (minimal to no symptoms)	12.5
Maternal absence of Axis I or II diagnosis	26.8
Maternal presence of at least one Axis I diagnosis	73.2
Maternal presence of at least one Axis II diagnosis	50.0

Table 2. Parameters of Scores of Role Confusion Dimensions

Rating Scale Score	1	2	3	4	5	Skewness	Kurtosis
Adolescent as Parent	23.2%	28.6%	23.2%	17.9%	7.1%	.34%	-.88
Adolescent as Peer	39.2%	23.2%	21.4%	14.3%	1.8%	.55%	-.88
Adolescent as Partner	39.3%	25.0%	23.2%	12.5%	0.0%	.47%	-1.08

Table 3. Analyses of Variance between Overall Role Confusion and Known Groups

Variable	Test Group			Comparison Group	
	$F(1, 54)$	$M(SD)$	n	$M(SD)$	n
Maternal BPD	7.43**	0.74 (2.26)	28	-0.74 (1.76)	28
Maternal MDD	2.95 [†]	-0.33 (2.02)	18	0.70 (2.26)	38
Maternal AUD	5.15*	0.81 (2.37)	21	-0.48 (1.86)	36

Note. [†] $p < .10$; * $p < .05$; ** $p < .01$. BPD = borderline personality disorder. MDD = major depressive disorder. AUD = alcohol use disorder.

Table 4. Correlations between Mother-Adolescent Role Confusion and Adolescent Borderline Features and Variable Descriptives

Variable	Adolescent as Parent	Adolescent as Peer	Adolescent as Partner	Overall Role Confusion	<i>M (SD)</i>
Adolescent as Parent					2.57 (1.23)
Adolescent as Peer	.36**				2.16 (1.16)
Adolescent as Partner	.18	.25			2.09 (1.07)
Overall Role Confusion	.72**	.75**	.67**		.00 (2.14)
Affective instability	.26 [†]	.33*	.30*	.41**	7.54 (4.35)
Identity disturbance	.34**	.08	.26 [†]	.32*	7.93 (3.77)
Negative relationships	.23 [†]	.34*	.27*	.39**	7.43 (3.73)
Self-harm/impulsivity	.01	.10	.24 [†]	.16	5.18 (3.97)
Total borderline features	.26 [†]	.26 [†]	.33*	.40**	28.07 (12.86)

Note. [†] $p < .10$; * $p < .05$; ** $p < .01$.

Table 5. Correlations between Mother-Adolescent Role Confusion and Adolescent Behavior Problems and Variable Descriptives

Variable	Adolescent as Parent	Adolescent as Peer	Adolescent as Partner	Overall Role Confusion	<i>M (SD)</i>
Internalizing	.18	.07	.16	.19	56.09 (12.24)
Withdrawn/Depressed	.15	.12	.03	.14	56.86 (6.82)
Somatic Complaints	.17	-.01	.21	.17	60.09 (10.00)
Anxious/Depressed	.12	-.09	.23 [†]	.07	55.64 (7.83)
Externalizing	.02	.27*	.17	.22	56.45 (10.32)
Social Problems	.11	-.02	.21	.14	57.86 (7.93)
Thought Problems	.09	-.12	.12	.04	58.32 (9.23)
Attention Problems	-.10	-.06	.28*	.06	58.38 (9.03)
Aggressive Behavior	.10	.19	.23 [†]	.25 [†]	58.07 (7.77)
Delinquent Problems	.02	.24 [†]	.14	.18	57.91 (6.71)

Note. [†] $p < .10$; * $p < .05$; ** $p < .01$.

Table 6. Hierarchical Multiple Regression for Adolescent as Parent Role Confusion Predicting Adolescent Identity

Disturbance

Step	Independent variables	ΔR^2	Cohen's f^2	β	B	t	CI		R^2 (adj.)	F	df
							<i>Lower</i>	<i>Upper</i>			
1.	Adolescent as peer			.01	.05	.10	-.85	.94			
	Adolescent as partner			.25	.89	1.83 [†]	-.08	1.86			
									.07 (.03)	1.85	(2, 53)
2.	Adolescent as peer			-.10	-.32	-.70	-1.22	.59			
	Adolescent as partner			.22	.77	1.66	-.16	1.71			
	Adolescent as parent	.10*	.11	.34	1.03	2.47*	.19	1.86	.16 (.12)	3.38*	(3, 52)

Note. [†] $p < .10$. * $p < .05$. CI = 95% confidence interval.

Table 7. Hierarchical Multiple Regression for Adolescent as Peer Role Confusion Predicting Negative Relationships

Step	Independent variables	ΔR^2	Cohen's f^2	β	B	t	CI		R^2 (adj.)	F	df
							<i>Lower</i>	<i>Upper</i>			
1.	Adolescent as parent			.19	.57	1.42	-.24	1.37			
	Adolescent as partner			.24	.84	1.82 [†]	-.09	1.76			
									.11 (.08)	3.23*	(2, 53)
2.	Adolescent as parent			.11	.32	.78	-.51	1.15			
	Adolescent as partner			.19	.67	1.44	-.26	1.59			
	Adolescent as peer	.05 [†]	.06	.25	.81	1.81 [†]	-.09	1.71	.16 (.11)	3.34*	(3, 52)

Note. [†] $p < .10$. * $p < .05$. CI = 95% confidence interval.

Table 8. Hierarchical Multiple Regression for Adolescent as Partner Role Confusion Predicting Adolescent Affective Instability

Step	Independent variables	ΔR^2	Cohen's f^2	β	B	t	CI		R^2 (adj.)	F	df
							<i>Lower</i>	<i>Upper</i>			
1.	Adolescent as parent			.17	.58	1.21	-.39	1.55			
	Adolescent as peer			.27	1.01	1.95 [†]	-.03	2.04			
									.13 (.10)	3.96*	(2, 53)
2.	Adolescent as parent			.14	.51	1.06	-.46	1.47			
	Adolescent as peer			.22	.83	1.60	-.21	1.87			
	Adolescent as partner	.04	.05	.21	.87	1.63	-.20	1.94	.17 (.12)	3.60*	(3, 52)

Note. [†] $p < .10$. * $p < .05$. CI = 95% confidence interval.

Dyadic Parent-Adolescent Role Confusion Scale (DPARCS)

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Dyadic Parent-Adolescent Role Confusion Scale (DPARCS)

In line with attachment theory, when a parent is unable to provide comfort and security to his or her child, the child may become organizing and caring toward the parent, receive unwarranted intimacy from the parent, and/or serve as the parent's intimate companion in order to gain needed proximity and attention (George & Solomon, 2008; Solomon & George, 2011). The vertical relationship between the parent and child becomes more horizontal in the family system (Hartup, 1986; Howes & Cicchetti, 1993; Sroufe, 1989). As role-confused interactions become common, the child forms an internal working model of relationships that extends into adolescence and later adulthood (e.g., compulsive caregiving; Bowlby, 1980). While we use the term *parent* in the current scale, this coding scale may also be used to observe and code interactions between adolescents and other caregivers.

The 5-point scale combines frequency, duration, intensity, and quality of role-confused behaviors of both the parent and the adolescent in their dyadic interaction. This rating scale is applicable to various interactional situations between a parent and an adolescent (e.g., conflict discussion).

There are three dimension of parent-adolescent role confusion:

- Adolescent as Parent
- Adolescent as Peer
- Adolescent as Partner

A description of each of the three dimensions is provided (pages 5-7) and includes the major themes (e.g., sexualized behavior, intellectual partnership and mutual reciprocity, and triangulation for Adolescent as Partner) and behavioral examples (e.g., prolonged proximity or touch) typical for each.

It is possible to observe more than one dimension of role confusion in a parent-adolescent dyad. Therefore, each dimension receives a single rating (1-5) based on the rating guidelines that follow (page 3), with three ratings total for each parent-adolescent dyad (see page 4 for example coding sheet). Training for the DPARCS includes familiarization with the construct and the literature as well as practice using the coding scale with others.

DPARCS Rating Guidelines

1 – Clarity of Roles

Both the parent and adolescent demonstrate comfort and confidence in their respective roles. The parent provides firm direction, sets necessary limits, and offers reassurance in response to the adolescent's needs, clearly maintaining authority and control. The parent does not demand care or concern from the adolescent regarding the parent's well-being. The adolescent respects the authority of the parent while also exercising developmentally appropriate independence. Neither the parent nor adolescent demonstrate role-confused behavior.

2 – Low Role Confusion

It is generally clear who is the parent and who is the adolescent, however the parent and/or adolescent display some signs of role-confused behavior and fall between the distinction of clear roles and moderate role confusion.

3 – Moderate Role Confusion

There is some ambiguity about who is the parent and who is the adolescent. The parent demonstrates signs of role-confused behaviors (e.g., indicating the need for reassurance or comfort; failing to set limits on disruptive adolescent behavior). However, the parent provides structure and authority when necessary. The adolescent may temporarily step into a confused role (e.g., show concern about the parent's well-being; offer comfort or reassurance to the parent), but does not assume full responsibility for managing or monitoring the parent's behavior.

4 – High Role Confusion

The parent and/or adolescent show frequent signs of role-confused behavior and fall between a moderate and very high degree of role confusion.

5 – Very High Role Confusion

The confusion of parent and adolescent roles dominate the interaction and are an integral component of the dyadic relationship. The parent rarely responds to adolescent as a parental figure and instead interacts with the adolescent as if he/she were a parent, contemporary adult peer, or romantic partner. The parent consistently seeks care and attention from the adolescent and appears dependent on the adolescent for feelings of safety and/or comfort. The adolescent takes active responsibility for managing, caring for, and/or appeasing the parent and appears mature, competent, and authoritative, as if an equal to the parent. There may be intense instances of physically intimate or sexualized behaviors between the parent and adolescent (e.g., prolonged physical proximity or touching).

DPARCS Coding Sheet

For each dimension of parent-adolescent role confusion (Adolescent as Parent, Adolescent as Peer, Adolescent as Partner), circle a rating (1-5) for each. Refer to page 3 for detailed rating guidelines. Refer to pages 5-7 for detailed explanations and examples for each dimension of role confusion. Use the space provided below each dimension rating for observational notes to guide each rating decision.

	1	2	3	4	5
Clarity of Roles		Low Role Confusion	Moderate Role Confusion	High Role Confusion	Very High Role Confusion
Adolescent as Parent	1	2	3	4	5
Adolescent as Peer	1	2	3	4	5
Adolescent as Partner	1	2	3	4	5

Adolescent as Parent

Parental deference

The parent defers to the adolescent instead of exerting control when called for (i.e., the parent allows the adolescent to dictate the situation when the parent needs to take charge). In attempts to set limits or exert control on the adolescent's inappropriate, disruptive, or disrespectful behavior, the parent may talk to adolescent in a hesitant, tentative, appeasing, and even fearful manner or become silent although a parental response seems warranted. The parent may be initially firm but back down when the adolescent is resistant.

Adolescent directing the parent

The parent allows and/or expects the adolescent to direct the task, leaving the adolescent to assume responsibility. The adolescent is actively and consistently organizing and managing the parent (e.g., offering assistance; explaining directions; reminding the parent to stay on task). The adolescent dictates, directs, or advises the parent to change his/her behavior in some way. The adolescent may appear frustrated and/or embarrassed by the parent's behavior and holding the parent accountable for his/her behavior. The adolescent uses an authoritative voice tone or gently scolds the parent. The parent may obey, comply, or even seem afraid of the adolescent.

Child-like parent behavior

The parent seems confused or helpless and elicits parenting from the adolescent. The parent makes comments about feeling inadequate, uncertain, or helpless (e.g., "I don't know what to do"). The parent appears dependent on the adolescent's physical presence and attention to maintain his/her own well-being and feelings of safety and expects the adolescent to provide comfort and reassurance.

Adolescent as a responsible, secure base

Both the parent and adolescent attend to regulating the parent's distressing affect. The adolescent is protective of and centers attention on the parent's care, worrying about the needs, concerns, and continual mental and physical functioning of the parent. This concern is woven into the dyadic relationship (i.e., the adolescent is vigilant and highly attuned to the parent's psychological and/or physical well-being). The adolescent acts as a secure base and appears mature for his/her age. The adolescent may also serve the role of the ultimate decision-maker of the domestic unit for developmentally inappropriate concerns (e.g., discipline and parenting of siblings; financial concerns beyond typical allowance; household duties beyond common chores).

Adolescent as Peer

Equality and power balance or struggle

The parent and the adolescent appear equal to one another, with a balanced distribution of power and control in the relationship. At times, they may engage in a power struggle (e.g., the adolescent telling the parent to “shut up;” bickering somewhat like peers or siblings, such as “You do it,” “No, you...”). The parent and/or adolescent tease the other like siblings.

Immature, non-disciplinary parent

The parent may be amused and distracted by the adolescent’s silly and/or joking antics (e.g., laughing, smiling, sarcasm), encouraging a peer-like relationship instead of setting appropriate limits. The parent may also initiate distracting activities with the adolescent that pull attention away from the task. If the parent attempts to set limits, the parent and/or adolescent do not take the disciplinary action seriously. The parent appears immature and does not seem to be a responsible adult.

Contemporary peers

The adolescent and parent behave together as contemporary peers. The adolescent and/or parent share personal issues with the other (e.g., gossip or drama within social groups or romantic relationships). The parent confides in the adolescent to cope with personal concerns and seeks validation and reassurance from the adolescent, as if in an intimate friendship (e.g., seeking advice about dating or problematic personal encounters). The adolescent serves the role of a best friend looking to comfort a friend in distress.

Inappropriate shared experiences

The parent displays interest in having inappropriate shared, exploratory, teenage experiences with the adolescent (e.g., attending a party; experimenting with drugs or alcohol; double dating). Alternatively, the adolescent wants to have shared adult experiences with the parent (e.g., engaging in mature conversations; spending time with the parent’s friends).

Adolescent as Partner

Sexualized behavior

The parent and/or adolescent use pronounced expressions of an intimate or sexual nature toward the other (e.g., pet names, flirting, caressing, primping, excessive touching, provocative teasing or body language). The parent and/or adolescent may be in close proximity to the other (e.g., leaning very close to the other; maintaining prolonged close contact). Other examples include requesting or demanding physical or verbal affection or introducing sexual content into the discussion.

Intellectual partnership and mutual reciprocity

The parent and/or adolescent relates to the other as serving the psychological role of romantic partner in a non-sexual manner. The parent seeks the adolescent's appreciation and collaboration in discussions, such that the adolescent serves as a mutual partner. The adolescent engages in comforting behaviors typical of a partner or spouse (e.g., asking how the parent is feeling or what the adolescent can do to comfort the parent; discussing political or social issues; gift-giving; etc.). The parent looks to the adolescent to provide a sense of personal comfort, joy, and happiness in an inter- or co-dependent manner. The parent takes into account the adolescent's influence and opinions when making important decisions (e.g., about purchases, paying bills, legal problems, etc.).

Triangulation

In the case of relational conflict, the parent finds his/her own spouse or parent inadequate and looks to the adolescent as a substitute spouse or partner for emotional comfort, company, and/or intimacy. The parent talks to the adolescent about a partner or spouse in a negative light and demands the adolescent's intervention. The parent attempts to persuade the adolescent to take his/her side in an argument. The adolescent appears caught in the middle of the parent's conflict. The adolescent seems to be aware of the parent's emotional needs and comforts the parent (e.g., agreeing to intervene on behalf of the parent; validating the parent's complaints about his/her partner). The parent may also interfere with and/or insert his/her self into the adolescent's romantic relationship.

Scale Pool Utilized in Development of DPARCS

Measure	Authors	Type	Age	Informant
A. Retrospective				
Adult Attachment Interview	George et al., 1984; Main & Goldwyn, 1991; Main et al., 2002	Semi-structured interview	Adolescence, adulthood	Self, observer
Perceptions of Adult Attachment Questionnaire	Lichtenstein & Cassidy, 1991	Questionnaire	Adulthood	Self
Parentification Scale	Mika, Bergner, & Baum, 1987	Questionnaire	Adulthood	Self
History of Attachments	Maysless et al., 2004	Semi-structured interview	19+	Self, observer
The Parentification Questionnaire	Jurkovic & Thirkield, 1998; Session & Jurkovic, 1986	Questionnaire	Adulthood	Self
B. Parent behavior				
Seductive Behavior	Sroufe & Ward, 1980	Parent-child interaction	Toddlerhood	Observer
Atypical Maternal Behavior Instrument for Assessment and Classification	Bronfman, Parsons, & Lyons-Ruth, 1992-2004	Parent-child interaction	Infancy	Observer
Experiences of Caregiving Interview	George & Solomon, 1996	Semi-structured interview	Parents of children 6-20	Self, observer
Parental Assessment of Role Confusion: Experiences of Caregiving Interview	Vulliez-Coady et al., 2013	Semi-structured interview	Parents	Self, observer
The Caregiving Helplessness Questionnaire	George & Solomon, 2008	Questionnaire	Parents	Self

Measure	Authors	Type	Age	Informant
Adult–Adolescent Parenting Inventory Version 2	Bavolek, 1984; Bavolek & Keene, 1999	Questionnaire	Parents	Self
C. Child behavior				
The Child Caretaking Scale	Baker & Tebes, 1994	Questionnaire	8-18	Self
Inadequate Boundaries Questionnaire	Mayseless & Scharf, 2000	Questionnaire	Adolescent	Self
Filial Responsibility Scale for Youth	Jurkovic, Kuperminc, & Casey, 2000	Questionnaire	11-18	Self
Childhood Disorganization and Control (MCDC) Scales	Bureau, Easterbrooks, Killam, & Lyons-Ruth, 2009	Parent-child interaction	7-9	Observer
Middle Childhood Attachment Strategies Coding System	Brumariu, Kerns, Bureau, & Lyons-Ruth, 2014	Parent-child interaction	8-12	Observer
D. Dyadic				
Dissolution of Generational Boundaries Scale	Sroufe et al., 1985	Parent-child interaction	3 ½	Observer
Qualitative Ratings of Parent/Child Interactions	Cox, 1997a, 1997b	Parent-child interaction	Toddlerhood, preschool	Observer
Boundary Dissolution	Shaffer & Sroufe, 2005	Family interaction	13	Observer
Goal-Corrected Partnership in Adolescence Coding System (GPACS)	Lyons-Ruth et al., 2004	Parent-child interaction	Adolescent	Observer

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VITA

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